

*Julie*

NOT FOR SALE—  
it's absolutely  
**FREE!!**

Julie's New and Revised Breyer Bar-be-que (Shake and Bake style), or,

HOW TO TORCH HORSES FOR FUN AND NOT KILL YOURSELF IN THE PROCESS

(copyright Julie Froelich, 1992)

#1 Thing To Remember!! Nothing is Absolute and Nothing is Carved in Stone!!!

All things change. But the thing to remember is to be SAFE as you can while you are remaking Breyers. As little heating of the plastic as is possible is the safest thing for you, healthwise. Breyer horses are made out of cellulose acetate, which is a semi-rigid plastic compound and are heat-extruded to form. Our methods of re-heating the plastic can be downright dangerous and should be undertaken with EXTREME caution!!! This is not a past-time for unattended children, and even adults are warned to exercise every caution. Burning Tenite (the commercial name for the cellulose acetate) is very flammable and flames up quickly and easily — the fumes from it are noxious, if not downright toxic. Never burn plastic in an enclosed room — work outdoors if at all possible (and if in the garage, not around anything with gasoline, such as the car, spare tank, or lawnmower), or with a fan blowing the smoke out of a house if you don't have somewhere to work outside.

Many compounds that are used for remaking procedures also have health hazards, some not very apparent at first. Burning tenite plastic fumes are extremely toxic to any birds that you may have in your house!! Do not do this if you have a parakeet or canary, cockatiel, finch, etc. It isn't good for you either. I suggest buying and wearing an organic resin respirator, available from hardware stores, some paint stores, and safety departments. This filters out many toxic materials and dusts. I once poisoned myself on epoxy resin dust that I was dremelling off a model and was VERY sick for days. Luckily, I got over it, but I won't do that again!!

Also protect your eyes with safety goggles (you can even get some nift-o keen-o coloured ones for cheap these days at places like Fleet Farm even. Glue little plastic horses on them if you want and be Unique.). If you are working with flame, or with a power motor-tool, such as a Dremel, flying pieces of plastic in your eyes are no joke! You may end up taking a trip to the hospital emergency room if you don't. And it doesn't feel good either (also take my word for that). There is nothing like a flying bit of hot and melted plastic in your eye to convince you that \$5 is cheap for eye protection. If you have long hair, get it out of your way if working with flame or a power tool. Put it in a pony-tail or whatever. Otherwise you may end up with short hair the painful way.

Always use caution and common sense. The human brain is the greatest computer that we know of, but it doesn't do much good unless you use it. Taking a longer time to get the results you want and doing it the safe way is better than disaster.

Okay, so much for basic safety. I will mention it again from time to time.

As I said, Breyer horses are made out of cellulose acetate plastic. There are two ways to remake the horses. One is to saw out pieces and carefully fit the others back together and resculpt over the whole, the other is to apply heat directly or indirectly to the model and bend it. Both methods have their applications, both have positive and negative. I use both and neither one is 'better' than the other. The best method is the one that works for you and is safe.

Breyer models are hollow in the body cavity, with the exception of Stablenates. If you were to apply heat directly to the body, head, or neck area of the model without first drilling a small air-hole somewhere on the horse, there is a good chance that the horse would 'blimp'. What happens is that the heat softens the plastic and at the same time, it expands the trapped gasses inside the model. Much like inflating a ball

balloon, the gasses expand and so does the plastic horse — turning into something that looks like the Goodyear Blimp, with not much in the way of horse-like features left on it. There is no cure for a blimped horse. The best you can do is salvage the legs for another remake, possibly any other parts that are not affected. Your other option is to paint the afflicted beast some hideous colour of appaloosa — green and yellow, fushia and purple, blue and orange — and make it one of the get of the infamous Green Blimp, the first horse that this happened to.

Since the plastic will catch fire rather easily and burn out of control, it will often lose a lot of the detailing. If you would rather try the cut-and-fit method, I think that it is a lot safer myself.

For this method, you will mostly be using a coping saw (available at hardware stores for about \$3). Some people use hack saws, but I prefer the long open arm of the coping saw for making cuts in difficult places, such as under legs. I do not recommend the use of a Dremel saw-bit!! I tried using one of those and it took off like something possessed — straight for my hand. It chattered across the plastic and damaged the horse, and then it chewed on my hand a while. I was not seriously injured by it, but it quickly showed me that it had the potential for sending me to the Emergency Room in a hurry! That thing is dangerous and I do not advocate its use. Coping saws are enough to worry about. Using a new and sharp blade is best, it cuts the most quickly and will usually be safer than an old blade with metal fatigue. When a blade becomes dull, replace it. If it is over-used, it can snap while you are using it. I have never had one fly into my face, but I have received some serious cuts and scrapes on my fingers and hands from them.

A lot of remaking depends on how much you know about horse anatomy, the working of the joints, bones, and muscles, as well as about body proportion and motion. Do thorough research before you start. Work from photos of real horses, preferably ones that are well conformed and good examples of their breed and type. Whatever you cut and refit into a new position on the horse will need to be structurally altered to work correctly. Spend some time thinking about what you want to do ahead of your cutting. It is easier to think than to correct something hacked to bits. You may have to cut out chunks of plastic and throw them away to make it fit a new way, and likewise you will have some gaping holes to fill in later with something.

When I start a model, I usually remove the mane and tail and any leftover casting 'fin' along the seams of the model. I will also trim out heels, gummy pasterns, nostril soles of feet, ears, and under jaws and anything else that I think needs revision. I take off the entire tail because I am going to set a steel wire 'tailbone' into the horse later. I remove the mane so that the hair one added later will lie correctly. It is almost impossible to build up a neck over the plastic mane and have it be correct, so you will either have to remove the mane with a Dremel steel burr (#104 is my preference), or by heat-sinking it. Heat sinking is done by applying heat to the mane area and pushing it inward as it softens. This will later be epoxied over to a smooth muscle finish.

When you have decided what you want to attempt on a model, it is a good plan to make your working drawings on the model with a soft lead pencil (do not use pen or felt-tip. These will later bleed through your paint and show up to haunt you forever.

If you want to take a standing leg and raise it up for a trot for instance, I usually cut the leg off the body just above the elbow and following the curvature of the muscle above and around it. You will also have to restructure the shoulder later. Cut out a socket to shape (with either the saw or the Dremel) to refit it in at a forward angle, probably raised higher than it was before. To flex the knee, I cut the back of the knee in two places, taking out pie-shaped wedges so that the leg will have somewhere to bend to (sort of like bending metal), and a similar operation for the ankle as well. Hold this in a pot of hot water (heat on stove a large kettle of water, such as a spaghetti pot, with enough water to submerge the desired parts of

of the model). Be careful of steam burns and scalds, wear a pair of rubber dish gloves to help protect your hands. The hot water will soften the plastic up gradually, more slowly than direct flame will, but it may heat faster than you would think. Never let the horse rest in the pan on its own without being held by you — if it leans against the heated surface of the pan, it will likely deform out of shape there, sometimes so that it cannot be fixed again.

Take it out when it has softened. Experience teaches best and be cautious about this — take it out and keep testing it as you work. Too long and it may be too limp. Work quickly and bend the leg at the points where you cut before, being careful not to deform the leg in any area you don't want it bent. You may have to make more cuts if it will not bend enough or you didn't remove enough plastic originally. The plastic will become rigid again as it cools. You can run it under cool tap water to hasten it.

If you want to extend a hind leg further back, you can usually do this in a normal sort of way, from the hip, by cutting with your saw into the body of the horse from about the point of the hip down through the flank and into the groin area, then cutting from just under the tail, between the hindlegs to free the leg that you want to work on. When you boil this portion, you will stick the hip under water with the legs et al out of it. As a rule, I do not put any part of the horse I don't absolutely have to under hot water, especially hollow portions! When the plastic begins to relax, you can take it out of the water (watch out for hot water trapped inside that suddenly runs out the cuts and onto you when you tip it). Working quickly, pull the leg back a bit. Hind legs can be cut in a similar manner to the front legs at the hocks and ankles for bending more severely too. Just remember how their real joints would work and cut in the appropriate places.

Heads and necks may need to be repositioned as well. These can be cut at whatever interval along the neck will work best. In general, if you want to bend the horse's head to the right, you will need to make easement cuts along the left side, and vice versa to bend the other way. To bend down, make cuts along the crest. If the neck is set on too low or too high and you want to raise or lower it, you will need to cut the whole works off just above the shoulders and down to the base of the throat. Cut to refit on body by removing some of the neck at the withers (for those horses with high headsets, such as Arabians, Morgans, Saddlebreds and Hackneys), or out of the bottom if that works better for the model, you will have to cut and fit it as is appropriate to each model. In lowering the neck, you will usually have to cut some off the base of the neck and a little lower into the chest as well. Try not to boil the horse's head if at all possible! They are delicate and are easily distorted and usually irreparable. Any of the hollow portions can be distorted when hot if you grab them too hard, and faces cave in the easiest of all. Body cave-ins are usually easier to fix than faces, which may have to be totally replaced.

You can also take in a 'hay-belly' horse by a series of cuts and careful boiling. Cut the horse up the ventral line (that's the stomach, if you don't know), starting at the groin and making a long 'V' shape toward the chest. Usually you don't want to take in the area of the heart girth on the horse, just the belly, so taper it off at the chest. When you cut the horse completely around from just behind the shoulder go down through the heart girth area and up the other side to about where you started parallel to the other side. Do a similar cut from point of hip through the flank across the belly and up the other side to point of hip. The horse, held upside down in simmering water, will be carefully squeezed together when JUST sort enough to give (too long and your horse will sag apart so badly, you may never get him back in one piece, so watch carefully!). Squeeze together with your hands, carefully aligning the cut edges as you do this, especially on the ventral line. You want to do this rather in the manner of a corset, slimming the horse down, using your hands to mold it.

....4....

How do you like where your horse's eyes are? Some are 'way too high, like a giraffe's. I like to reset these to where they should be, by using the tiniest steel burr on my Dremel (very tiny, about the size of a pin-head). I cut around the whole eye structure, surrounding bony projection as well, and take it out. I will then tailor the hole lower on the head to where I want to put them back in and set them in place with epoxy. Then finish it with some remodelling of the surrounding structure to make it fit right. Likewise, you you don't like the way your horse's ears are, they're easier than you might think to saw off (again, take the entire structure, not just the tops) and cut the model or the ear to fit the new position. You can fit it later with epoxy. This way, a model with laid back ears can put them forward, or vice versa.

Assuming you've got your horse all hacked to pieces now and bent like you will want it later. You'll need to reassemble those pieces. I like to use a drill bit and drill lots of holes all over near the cuts. These will force epoxy through, so x that it will grip the model better, since most fillers aren't totally compatible with Tenite. I drill straight-shot tunnels through bent joints and will force both epoxy and a steel brad nail (cut to length with a wire cutter) through this to join it and strengthen it. Holes along body cuts will make little 'toes' that will hold to the epoxy forced into the body cuts and prevent cracking. If you're resetting a leg into a shoulder, drill holes through at angles to force epoxy through again, these help to keep it in place. Nails wouldn't hurt either, so long as you don't change your mind later ad have to try and cut through them.

What to use to fill holes — depends on what you can get. People have used everything from paper-mache to clay, but those are both very weak and poor materials. Plastic wood is a tad better, but tends to disintegrate with humidity and shrink & crack with age. My choice is putty or pliable epoxies. Body fillers for autos would work, but it is much more toxic. My favourites:

PC-7, made by The Protective Coating Company of Allentown, Pennsylvania. It is a 2-part epoxy that comes in ½ and 1 lb cans that you mix together as needed in roughly equal parts. It has a rather strong ammonia smell as it cures, but doesn't seem very toxic. It costs approximately \$12 a lb now.

Duro Ribbon-epoxy —sometimes hard to find, it comes in a ribbon of two parts, blue and yellow, that you mix together (trim out the little hard ridge where they meet on the ribbons. This never mixes together satisfactorily and will make things difficult later) and use. I use it mostly for detailing work, such as frogs, ergots, heel bulbs, nostrils, etc.

Epoxy Bars — another two-part epoxy that is pliable by hand. It must be well mixed together or it will cure improperly and easily shatter or crumble. Well mixed, it is hard and long lasting. There may be problems associated with this epoxy 'bleeding' a yellow colour through light coloured horses later on. I have been told that this is due to improper mixing, but I would advocate sealing the horse with something like Grumbacher spray varnish for acrylics between gesso coats to seal it before painting. Otherwise, a good all purpose filler tat most people find easiest to use. About \$10 a lb, made by Martin-Carbonne.

Devcon 5-minute Epoxy — good for tacking on shoes while fitting them, repairing breaks, and mounting horses on bases, will yellow in time however, so use sparingly.

Whether you decide to use the PC-7 or the Martin-Carbonne bars for most your remaking, follow the mixing directions provided with it. Until they are set up, both may be washed out of clothing if you get at it with laundering IMMEDIATELY, but bets not to get it on any light clothing at all — work in old clothes and somewhere that it won't get into carpeting. If you are working with the PC-7, you will build up layers gradually. Epxy bars work faster as a rule, but you do have to worry about the bleed-through problem. If you are cutting and fitting, use masking tape to hold joint:

in place until the epoxy hardens over night. I prefer to use PC-7 for forcing into leg holes myself as it works better with the steel pinning and has better adhesion than the epoxy bars. I have repaired many horses with epoxy bar legs that have broken, but rarely will a steel pin & PC-7 leg let go, even after bouncing off floors.

As you work with either, you can use water to smooth out the surface as ~~x~~ working for less sanding work later. I have been told that vegetable oil works even better for this purpose, and after curing you wash the oil off with soap and water.

Make sure that pins in legs are cut off short enough so that both ends are not sticking out above the surface of the leg. Having it slightly sunken into the leg is better, as hitting one of these will dull down an expensive Dremel bit in a hurry. Force epoxy into the interior of the model through the small drilled holes and through cuts so that it will give the filler a better grip on the model when resetting any leg, neck, or bridging any gaps in the body.

Duro Ribbon epoxy can be used similarly, but it is more expensive as well as remaining more flexible throughout its entire life. For this reason, I use it more for its modelling clay texture. It can be used for general body work, but it is not as useful as Martin-Carbone or PC-7 in this application. It is superior for doing detailing work on ears, nostrils, around eye bones, and most especially for forming the horse's genitals. I always dremel off the non-existent sex of a model and re-sex it correctly, or change its sex entirely). You can buy this at hardware and paint stores.

Devcon 5-Minute epoxy has limited uses, mostly repair work at a live show when something breaks unexpectedly. However it is also good for evening off the bottoms of hooves, attaching shoes, or making temporary anchors to hold things together, such as when reattaching a tricky neck.. It sets up fast, can be trimmed, and then use the PC-7 or epoxy bars for strength to force-fill around it. It saves time when of the essence, cutting out one curing step.

To set a shoe with 5-minute epoxy, shape your shoe to the foot and trim. Flatten it, and attach it to the sole of the hoof along the rim wall. Make sure that it is level on the ground, or at the right angle for a raised foot. Use sparingly. Trim when cured if necessary, and I then run a thin paste of PC-7 over the hoof and fill the groove a bit. This also helps adhere the shoe better. When cured, sand the hoof down with about 120 grade sandpaper. Rather like doing a real horses hoof, except you use sandpaper instead of a rasp.

Since a number of remakers have been developing stress-related hand problems due to the use of high-vibration motor-tools in remake grinding, the alternatives to this process become more and more in demand. Since I am one of the folks suffering from this problem, I hope to offer some help to other remakers and some suggestions to make it possible to keep remaking with minimal damage to yourself.

Any time that you burn plastic composition of the tenite in remaking, you do structural damage to the strength of the plastic and expose yourself to possibly dangerous chemical reaction. Any time that you heat tenite for remaking (especially with an open flame), make SURE that you have adequate ventilation, working outdoors if at all possible, or with windows open. This is a problem in winter, but the smoke is likely to do more injury to your health — aside from the possibilities of fire and carcinogens, cyanide gas can be released from the burning of some types of plastics. I don't know if Tenite is dangerous this way or not, so exercise proper caution and respect.

Because I have Raynaud's Syndrome in my hands, I have found it necessary to do as much remaking now with direct heat if possible.

The first and safest method is likely to be using a candle. This is fairly safe method, although it is sometimes difficult to apply heat directly to the area desired, and can spill melted wax onto you, your clothing or furnishings, so exercise a little care. It will take longer than most other methods, but has less tendency to catch

alight, hence, less possibility of toxic fumes.

Secondly, is the use of disposable (or refillable, for those of you more environmentally conscious) butane pocket lighters. Buy 4 or more, so that you can switch lighters frequently — they tend to overheat with extended use, and can cause burns to your hands. They have also been known to pop the little metal parts apart with extended use, causing me to worry about the possibility of the whole thing catching flame in your hand — another trip to the ER!! This is a faster method than the candle, easier to direct the flame, and not likely to drip wax. Be careful of the overheating problem and switch lighters frequently. Stop if they are all getting hot and wait til they cool down. Be careful of this method of heating as it will often overheat the plastic and it will catch fire more quickly. Keep the flame moving so that it will heat the plastic, but not burn it. The smaller the area, the faster it will flame, such as a Stablemate's legs. When the plastic catches fire and burns, it is very much like a marshmallow burning. I usually blow the flame out quickly, but once it has caught fire and burnt, the plastic will become extremely brittle and will break easily afterward, unless you do a lot of steel-pinning through the weakened areas (in legs) by drilling thru with a moto-tool.

Other methods use a propane torch, which admittedly is probably the fastest — and most dangerous — method. I do not recommend it. Other people have used a heat gun, such as for stripping paint off walls, with the small directional nozzle attached. A heat gun like this will cost about \$30-40 and I would also caution the use of this implement to more experienced and adult remakers only. For most uses, the candle is slow, but most reliable.

In order to by-pass hot water, hot wax, and burning plastic, some people have tried to microwave models..this, I feel, is much less than satisfactory. The plastic heats at different rates, depending on the thickness of the plastic, which can vary considerably. It also tends to cause the legs to shrink on some models, and if the model is not properly vented with an airhole to the interior cavity, I am sure that they can easily bloat. It also applies heat over the entire horse, so care must be used when you pick the model up that you don't accidentally cave it in. This is difficult to remedy after the fact, unless you are a very good sculptor on your own.

However, the use of heating has become more necessary. I do find that it is possible to first vent the model (sawing off the tail, esp. if you are going to hair the model is the easiest way. It leaves a hole from the interior for exchange of gases) before starting. You do not have to do this on any horse that you are not heating the areas that are hollow on, nor Stablemates, which are solid plastic. Heating up the plastic manes and indenting them INTO the model, rather than dremelling them off saves a LOT of wear and tear on your hands, and it is easy to apply epoxy putty over this rough exterior after indenting.

Carbonization frequently occurs with burning techniques, in the form of black soot on the model. This should be well washed with soap and water previous to epoxying and allowed to dry. Not all discolouration will be removed, just the surface soot.

I have also found that gentle heating of joints to be bent will sometimes allow me to keep the surrounding 'bone' areas of the leg rigid, while the joints will now flex. By careful bending of that leg at the joint area, I can force softened plastic OUT of the joint area, rather the way you can squish jelly out of a sandwich at the sides. When this rehardens, you will have to dremel it off, but I find that this is usually less work than much of the cut-and-fit epoxying method work was. And, if you gently reheat the excess plastic you wish to trim off, this can frequently be carved off with a sharp paring knife blade, saving more dremelling.

Stablemates and Little Bits models can very often be entirely remade with direct-heat methods, which I find to be lots of fun. These little ones respond VERY quickly to heating on legs, so be cautious until you know approximately how long it will take to soften one. You can also heat the solid body masses of Stablemates for

for remaking this way very well, but Little Bits are hollow and need to be vented if you use this method. Classics also respond well to direct-heat method, by and large. Traditionals are harder to remake by this method, and I use it mostly on smaller leg jobs for them. I still find that I must remove and reset a shoulder as warranted by bone structure. I have seen some remakers also burn the shoulder area and wrench it into place (same for hips), but I have not seen it done very well as yet. It may be that in the future some alternate method will present itself, but at this time, for major repositioning of the larger joints on Classics and Traditionals, I still advise the cut-and-fit method.

If you are suffering from Raynaud's Syndrome as well, you may be well advised to trade in your old hand-held tool for one with a flexible shaft. Mine took some getting used to as it was not quite as easy to handle as the other, but in the long run, there was less vibration and damage to my hands and my condition improved a lot. It was well worth the money.

When you have finished with your epoxy work, filling and restructuring muscles and bones, you are ready to start the finishing process. Get out sandpaper (medium and fine grits, such as 150, 120, and 220) and a bottle of nailpolish remover (the kind with acetone in it). The polish remover will dissolve Tenite, so use it carefully. I use this along the casting seams to smooth it and take off ridges and rough marks. It will also smooth out Dremelled areas to an extent. Use little squares of paper towel to do this, I find that the cheap stuff works best for it as it doesn't leave fibers behind in the dissolved plastic — cotton balls are DEFINITELY a no-no, or your horse will be permanently covered in lots of little hairy strands nearly impossible to remove. Anyway, use the moistened papertowel squares to smooth off Tenite and throw them away frequently as once they are coated in dissolved plastic, they're not working anymore. I try to finish my models when epoxying with as smooth a coat of PC-7 or epoxy bars (using the water or oil method) so I have as little sanding to do as possible, because it's not that much fun. It is a necessary step however to sand off lumps and bumps that a real horse doesn't have. It is also very necessary to make a smoothly sanded transition between where your epoxying leaves off and the original plastic begins. One of the problems of using paper mache is that this never works well and there are usually very visible ridges between paper and plastic that no amount of paint will hide (as well as probably breaking later on). Sand off any rough spots in your fillers and if necessary, patch any sunken areas you didn't notice before out to proper shape with more epoxy. Let that cure and sand again.

If you haven't used your Dremel to do things like hollow out the ears and nose, bars of the jaw and so on, do so now. Little details like adding the proper shape to the bulbs of the heel and on to the frog make a real difference in the realism of your model. You may also notice that the mouth line from each half of the mold doesn't meet correctly and now is the time to fix that too.

When your horse is all sanded and smooth, washed and dried, give him a coat of gesso. This is a white paint-like semi-liquid used to prepare the ground (the model) to accept and hold the paint better. You may want to do a number of coats, depending on how rough or smooth your finishing technique was. You can also use a brush to make hair patterns in the gesso before you start to paint, but be careful not to overdo it. You can also build up layers of gesso and sand those down to give an ultra-smooth finish to your work. Gesso makes the paint grip the model better and helps prevent it from being easily gouged or scratched off later.

If you like, you can add a texture of veins before you paint. I use whatever paint I have handy with a nice smooth consistency. Colour is immaterial, since you will be painting over this later anyway. Thin it with water if necessary, to about the consistency of very heavy cream. Using a liner brush (little red sable things, sizes

O to 000) I paint on tiny ridges of the paint across the model as closely to the way that real veins go as possible, especially the ones on the face, down the insides of the legs, across gaskins and forearms, and along the underside of the belly, all the places where a real horse's skin is thinnest and the veins show more. If you study some veterinary texts on the cardiovascular system it will help, but also looking at photos of real horses, especially after they have been working hard and popped the veins up to be seen more easily. You do not see veins extending over areas like the rump of the horse where the hide is thickest, so study a real pattern (or a few) to get a realistic effect on your model. I also like to spread some paint along the crest of the neck, then use a tiny brush to paint it downward, leaving a texture of wrinkled loose neck skin there.

When all this is done, I paint it!! If you have used the Martin-Carbonne epoxy bars and are afraid of a bleed-through on a light coloured horse, spray between gesso coats with Grumbacher matte acrylic varnish (make sure it is for acrylic at this point). Recoat with gesso. So far, that has sealed any of mine in and none have bled through, but it is something that bears watching for the future.

I prefer to use acrylic paints myself. If you are happier with oils, then use oils. I like acrylics because they dry faster and I think that they are somewhat stronger than oils in durability, as well as less likely to pick up 'fuzz' in the finish. I once saw a black oil-painted horse completely covered in grey table-fuzz that was MOST unattractive. A sealant probably would have helped it, but by that time it was too late.

Painting is where much of the originality and style of the individual artist occurs. Many people are now airbrushing horses, but this is not a required thing at all, indeed, most airbrushed horses lack individuality. Some are extremely well done, but it is yet another area to have to master another set of techniques. I paint by hand still and find it satisfactory, as well as easy to transport over the cumbersome air compressor equipment. I like to use fine-grained sponges for most the basic shading work, and then later use stiff white-bristled brushes to dry-brush in shadings paint on chestnuts, and do things like that. If you do decide to use airbrushes, I advocate that you go back later and do some dry-brush work to finish up, especially on the faces. The faces are the most important area as far as character of the horse goes, and a poorly painted one will not have the memorable character and show 'pizzazz' that a well painted one will.

What brands of paint you use will depend on what you can find. My own preference is for Liquitex brand, and I will go out of my way to find it and stockpile it so I don't run out. It seems to me that Liquitex tends to last longer in terms of shelf-life hardening, or separating than Hypolar colours do. Most colours CAN be mixed back together if they separate, but once they dry out, that's all she wrote. You can't reconstitute it and you can't remove it, so think about what you are doing. When working on a palette with colours, I keep a spray bottle of water handy to lightly mist the paints every now and then to keep them from drying out. If I am not finishing the job in one sitting, I cover the paints air-tight until ready to use again.

Acrylics are much less chemically active than most oil preparations and with a very few exceptions, acrylics are harmless colours. You have to watch out for some of the chemical reds, yellow and oranges (such as the Cadmiums) as they are poisonous, however, I can't think of a single horse colour that requires the use of these in creating the colour. By and large, I stick to earth-pigments, such as Titanium white, Mars black, Burnt and Raw sienna, Burnt Umber (to a lesser degree, Raw umber — it has a rather unpleasant green-brown undertone that I don't use often), and Yellow oxide. That and the metallics (with mica added) are almost all that I ever use. Those colours are based on earth and are non-toxic (altho it is not advocated that you paint tableware with it or eat it. My dog ate a tube of Cerulean blue one time and it didn't hurt her, but just avoid ingesting it).